



CPUC Activities Supporting Implementation of AB 758

September 28, 2010 Joint Committee
Workshop on Energy Efficiency,
Regional Partnerships, and the American
Recovery and Reinvestment Act

**Simon Eilif Baker, Energy Division
California Public Utilities Commission (CPUC)**





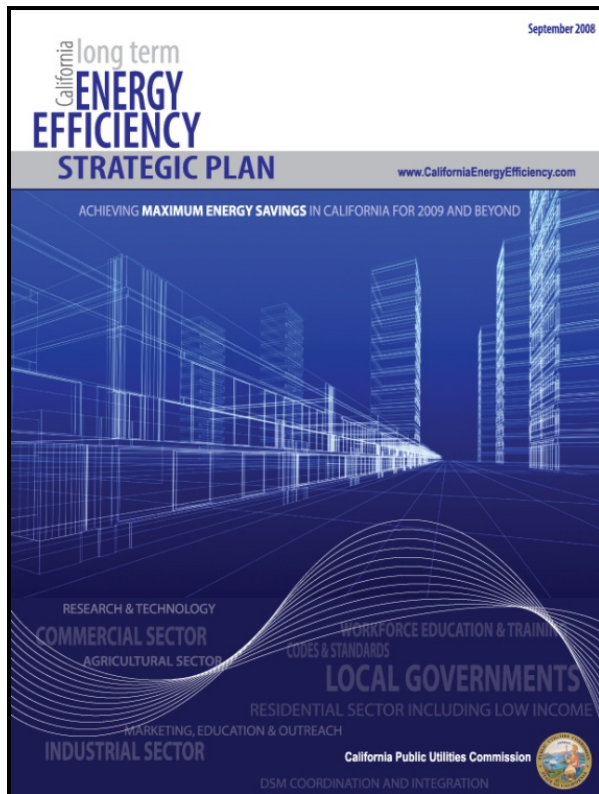
Presentation Overview

- 2008 Strategic Plan
- Overview of 2010-2012 IOU Energy Efficiency Portfolio
- Selected IOU Programs Directly Related to AB 758
- Closing Remarks
- Appendices





California Long-Term Energy Efficiency Strategic Plan



www.californiaenergyefficiency.com

- In 2008, CPUC launched an initiative to make energy efficiency a way of life in California
- A roadmap for energy efficiency through 2020 and beyond
- Goal for existing residential: Reduce consumption 40% by 2020
- Goal for existing commercial: 50% of buildings will be ZNE by 2030
- Ongoing stakeholder engagement through established Task Forces
- Momentum maintained through Action Plans

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2010-2012 IOU Energy Efficiency Portfolio

- CPUC has approved **\$3.8 billion** in 2010-2012 EE funding:
 - \$3.13 billion for general EE programs
 - \$750 million for low income programs
- **\$2 + billion** in EE funding for residential and non-residential retrofit programs
- Three-year savings potential: 7,000 GWh / 1,500 MW / 150 MMTherms
- IOUs' approved portfolios were guided by the Strategic Plan

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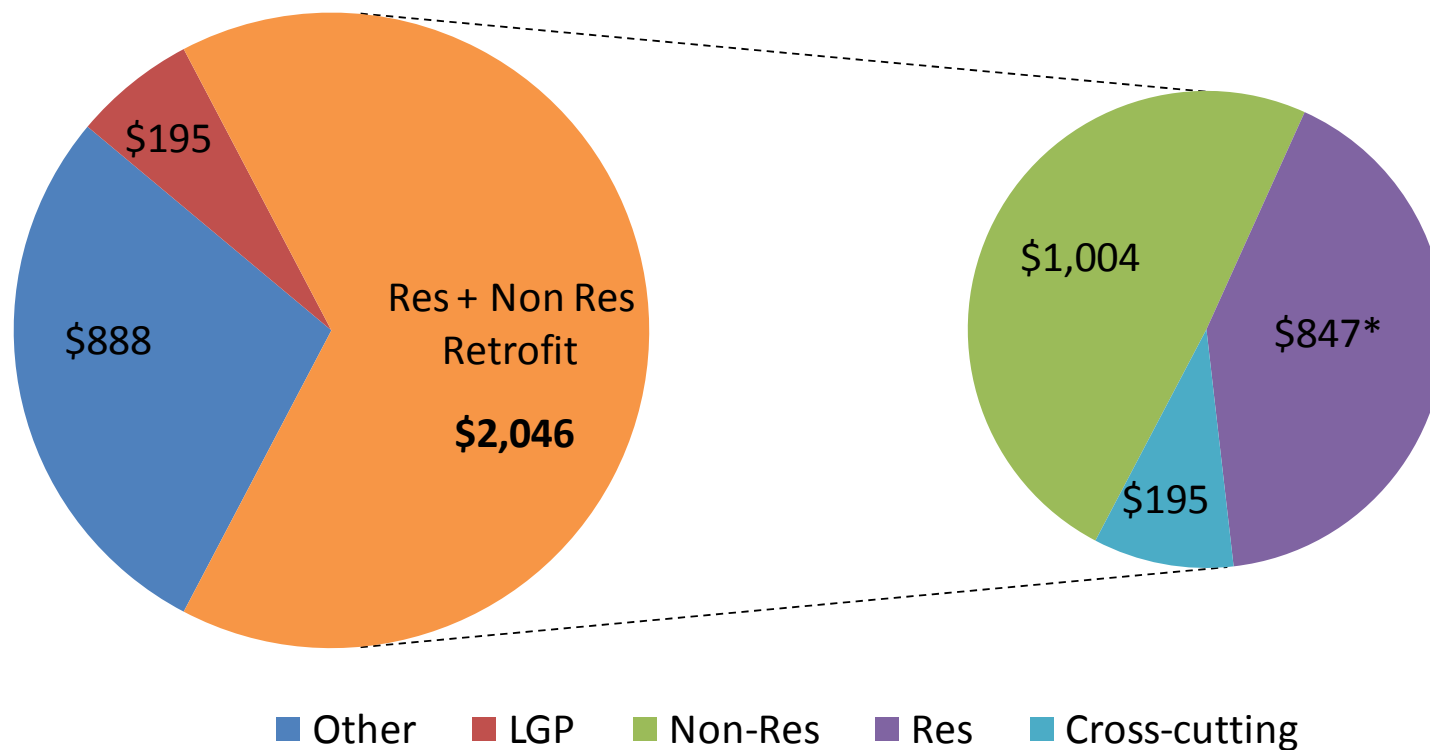
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2010-2012 IOU Energy Efficiency Budgets (\$ millions)



Other (Not Directly Relevant to AB 758) = Industrial, Agricultural, New Construction, EM&V, Emerging Technologies, and Codes & Standards

Non-Res = Commercial + Institutional

Res = Residential + HVAC

Cross-cutting = Marketing, Education & Outreach (ME&O), Workforce Education & Training (WE&T), Integrated Demand-Side Management (IDSM), and Lighting Market Transformation (LMT)

* Res includes HVAC but there is some HVAC in Non-Res as well

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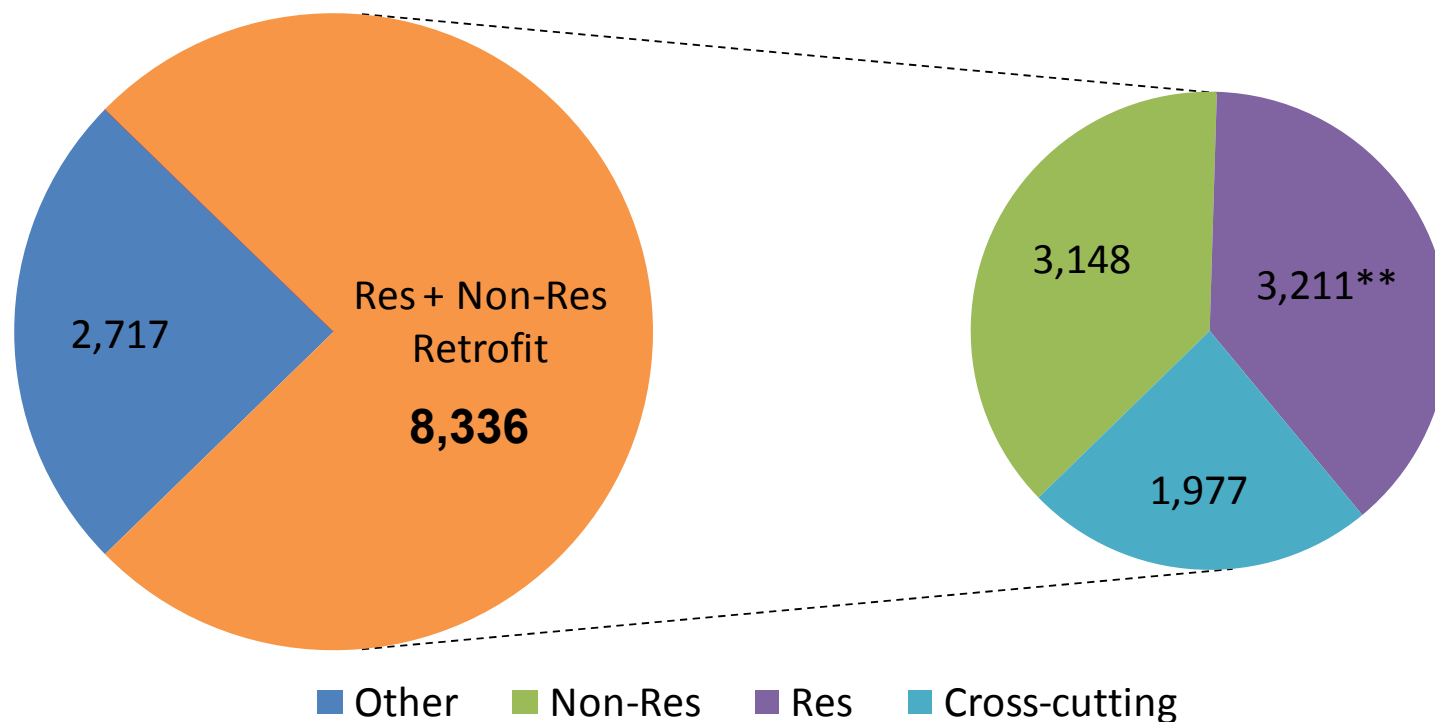
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2010-2012 IOU Energy Efficiency Savings (GWh)



Other= Industrial, Agricultural, New Construction, EM&V, Emerging Technologies, and C&S

Non-Res = Commercial + Institutional*

Res = Residential + HVAC

Cross-cutting = ME&O, WE&T, IDSM, LMT

Note: Institutional and LGP savings are included in the various sectors

** Res includes HVAC but there is some HVAC in Non-Res as well

SOURCE: November 23, 2009 Compliance Filing pursuant to D.09-09-047

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Residential Programs

- Whole-house retrofit program
 - \$111M incentive program offering basic (prescriptive) and advanced (performance) packages
 - SF available October 1; MF available 2011
 - Marketed as Energy Upgrade California
- Home energy efficiency rebate (HEER) program
 - \$142M program offers consumer rebates for energy efficiency appliances and equipment (e.g., refrigerators, tankless water heaters, etc.)
- Statewide demand-side clean energy Brand and Web Portal
 - \$80M marketing and outreach program will raise public awareness about energy efficiency and other demand-side options





Non-Residential Programs

- Benchmarking requirements
 - D.09-09-047 requires benchmarking of all commercial buildings touched by IOU programs
 - Targeting marketing to high-usage customers
 - Intersects with AB 1103
- Non-residential audits
 - \$34M program provides technical assistance and cost-effectiveness calculations
 - Retro-commissioning (RCx) audit identifies opportunities to optimize building and system performance



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Non-Residential Programs (Cont'd)

- Calculated incentive program
 - \$149M program provides incentives based on whole system modeling
 - Includes technical and design assistance for retrofit and RCx projects
- On-bill financing (OBF)
 - \$41.5M program provides 0% financing to credit-worthy non-residential customers installing measures through IOU programs
- Innovator pilots (e.g.)
 - \$8.6M SCE Sustainable Portfolios pilot targets hard-to-reach leased office space
 - PG&E Green Communities pilot will aid cities and schools that test creative approaches to achieve energy and GHG goals



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Cross-cutting Programs

- Financing gap analysis
 - D.09-09-047 direct Energy Division to assess financing needs recommend appropriate ratepayer-backed financing strategies
 - Dovetails with CPUC mandate under AB 758
 - Final report expected mid 2011
- Integrated Demand-Side Management
 - \$11M program promotes integration of EE, DR, and DG
 - Progressive Energy Audit Tool - on-line integrated audit tool (Q4 2011)
- Workforce Education & Training
 - \$102M program provides workforce training and education within energy-related trades
 - \$10M HVAC WE&T program offers dedicated, industry-specific training
 - WE&T needs assessment ordered in D.09-09-047 (expected Dec 2010)

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Cross-cutting Programs (Cont'd)

- HVAC Performance Alliance
 - IOUs funded formation of the Alliance, an unprecedented collaboration of HVAC industry stakeholders around EE initiatives
 - Committees focusing on code compliance, residential quality maintenance, and other Strategic Plan objectives.
- Codes and Standards Compliance Enhancement
 - New \$3.8 M program provides training and support to building officials, develops process improvement tools, and aims to simplify and expedite permitting and compliance processes
 - Supports Governor's AB 758 bill signing directive

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Closing Remarks

- Given the scope of interrelated activities, need for coordination, and significance of AB 758 in meeting state policy goals:
 - A joint work plan is needed
 - CPUC is committed to working with our sister agency to plan and implement AB 758
- The AB 758 program design should take advantage of lessons learned from CPUC's EM&V activities
 - Leverage \$125M committed to EM&V in current cycle, as well as 2006-2008 EM&V already completed.





Thank You



Simon Eilif Baker
simon.baker@cpuc.ca.gov
415-703-5649





Back-up Slides

- Comprehensive list and funding levels of 2010-2012 IOU programs relevant to AB 758:
 - Residential
 - Commercial
 - Cross-cutting
- For more information, see Fact Sheets on the IOUs' 2010-2012 efficiency programs at www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/factsheets.htm

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IOU Residential Programs relevant to AB 758

- Whole House Retrofit Program (\$111M)
- Home Energy Efficiency Survey Program (\$32M)
- Advanced Consumer Lighting (\$83M)
- Appliance Rebate Program (\$68M)
- Business and Consumer Electronics (\$45M)
- Residential HVAC Quality Installation (\$17M)
- Upstream HVAC Equipment Incentives (\$32M)

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IOU Non-residential programs relevant to AB 758

- Non-Residential Audits (\$34M)
- Retrofits & Retro-Commissioning
- On-Bill Financing (\$41.5M)
- Benchmarking Integration
- Commercial HVAC Quality Installation (\$10M)
- Upstream HVAC Equipment Incentives (\$32M)
- Continuous Energy Improvement (\$18M)
- Innovator Pilots (\$34M)

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IOU Cross-cutting programs relevant to AB 758

- Integrated Demand-side Management (\$11M)
- Workforce Education & Training (\$103M)
- Statewide Marketing, Education and Outreach (\$80M) – Brand, Web Portal
- Codes & Standards Compliance Enhancement (\$3.8M)
- HVAC Residential & Commercial Quality Maintenance (\$38M)
- HVAC Technology & System Diagnostics Advocacy (\$20M)
- Lighting Market Transformation (\$1.5M)

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